



March 4, 2016

Welcome to the latest bi-weekly Tethys Blast, which will update you with new information available on Tethys, new features of Tethys, and current news articles of international interest on wind and marine renewable energy. We hope that this becomes a valuable tool to help you stay connected to your colleagues and to introduce you to new research, new contacts, and ongoing milestones in renewable ocean energy development.

Upcoming Webinar: Collision Risk in Scotland

Annex IV is hosting a public webinar on March 15 about understanding and resolving collision risk between marine mammals and tidal turbines in Scotland. Access information is available on Tethys: <http://tethys.pnnl.gov/annex-iv-8>.

Completed Webinar: Monitoring Bats Offshore

WREN hosted a public webinar on March 1 about monitoring bat activity offshore in the Eastern United States and the Netherlands. Information including presentations and video recording are available on Tethys: <http://tethys.pnnl.gov/wren-6>.

US DOE Announces New FOA and RFI

The US Department of Energy, Office of Energy Efficiency & Renewable Energy (EERE) has issued a [funding opportunity announcement \(FOA\)](#) related to environmental monitoring technology for the marine and hydrokinetic (MHK) industry. EERE also announced a [Request For Information \(RFI\)](#) regarding the readiness of technologies intended to reduce eagle mortalities at operational wind turbines or wind facilities, seeking feedback by March 16th on what may eventually become a funding opportunity.

New Documents on Tethys

A total of 13 new documents have been added to Tethys in the last two weeks. These documents have been hand-selected for their relevance to the environmental effects of wind and marine renewable energy. The listings below are short introductions to several new or popular documents that can be accessed through the accompanying Tethys links:

Long-term Bat Monitoring on Islands, Offshore Structures, and Coastal Sites in the Gulf of Maine, mid-Atlantic, and Great Lakes - Final Report - Stantec Consulting Services

To better understand seasonal and spatial distribution of bats offshore, the Department of Energy (DOE) funded an acoustic survey of bat activity on islands, offshore structures, and coastal sites in the New England Gulf of Maine, mid-Atlantic coast, and Great Lakes regions from 2012 – 2014 (Award Number DE-EE005378). The primary purpose of the study was to enhance understanding of when and where bats occur offshore (here defined as waters beyond 3 nautical miles from land), with the underlying objective of assessing potential impacts to bats from offshore wind energy development.

What Drives Attitudes towards Marine Renewable Energy Development in Island Communities in the UK? - de Groot and Bailey 2016

Island communities represent key potential arenas for marine renewable energy (MRE) because of their tidal, wave and off-shore wind resources. However, although MRE developments could offer remote island communities significant economic benefits, limited research exists on community attitudes towards MRE or, crucially, the main factors shaping responses. Research in the Shetlands, Orkneys and Scillies (UK) revealed generally positive attitudes towards MRE but also that attitudes were strongly shaped by place-related values, not just the direct socio-economic and environmental credentials of proposed locations.

Communication Masking in Marine Mammals: A Review and Research Strategy - Erbe et al. 2016

Underwater noise, whether of natural or anthropogenic origin, has the ability to interfere with the way in which marine mammals receive acoustic signals (i.e., for communication, social interaction, foraging, navigation, etc.). This phenomenon, termed auditory masking, has been well studied in humans and terrestrial vertebrates (in particular birds), but less so in marine mammals. Anthropogenic underwater noise seems to be increasing in parts of the world's oceans and concerns about associated bioacoustic effects, including masking, are growing.

Environmental and Social Footprint of Offshore Wind Energy: Comparison with Onshore Counterpart - Kaldellis et al. 2016

Offshore wind power comprises a relatively new challenge for the international wind industry with a demonstration history of around twenty years and a ten-year commercial history for large, utility-scale projects. By comparison to other forms of electric power generation, offshore wind energy is generally considered to have relatively benign effects on the marine environment. However, offshore projects include platforms, turbines, cables, substations, grids, interconnection and shipping, dredging and associated construction activity.

Study on the Influence of the Distance to Shore for a Wave Energy Farm Operating in the Central Part of the Portuguese Nearshore - Rusu and Onea 2016

The objective of the present work is to assess the coastal impact induced by a generic wave farm operating in the central part of the Portuguese continental coastal environment, south of Lisbon. In order to identify better the most relevant wave patterns in the target area, two data sets were processed and analyzed.

Current News

Current news articles of international interest on wind and marine renewable energy include:

Coonooer Bridge Begins Generating Cheapest Wind Energy in Australia

Victoria's Coonooer Bridge wind farm has begun producing what is assumed to be the cheapest wind energy in Australia, after the project became the first from the ACT government's hugely successful wind auction to generate power.

ORE Catapult Reveals 7 MW Offshore Wind Turbine for Research

The Offshore Renewable Energy (ORE) Catapult has unveiled a 7 MW demonstration offshore wind turbine in Levenmouth, U.K., underlining the vital role that Scotland, and the wider U.K., can play in research, technology and skills development at the very heart of the global renewable energy industry.

Deepwater Wind eyes south Brooklyn waterfront to kick-start offshore wind farm

Deepwater Wind LLC, the company building the only U.S. offshore wind farm, is looking at a Brooklyn waterfront site as a staging ground as it pursues a potential project off the south shore of Long Island, according to a person familiar with the negotiations.

DOE announces Wave Energy Prize finalists

The U.S. Department of Energy (DOE) announced today that nine teams have been named finalists in the Wave Energy Prize -- a 20-month design-build-test competition -- and will proceed to the next phase of the competition.

EMEC announces flurry of activity at Scottish marine energy site

Capping a busy February for the European Marine Energy Centre is an announcement that tidal turbine manufacturer Tocado has signed a 20-year deal for testing at EMEC's array in Orkney.